



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/693,089 | 10/24/2003 | Kelley Jones | SASL:013\HON | 8449 |

7590
Docket Clerk
P.O. Drawer 802432
Dallas, TX 75380

11/03/2006

EXAMINER

LOWE, MICHAEL S

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3652

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|-------------------------------|--|
| Office Action Summary | Application No. 10/693,089 | Applicant(s) JONES, KELLEY | |
| | Examiner M. Scott Lowe | Art Unit 3652 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

In view of the appeal brief filed on 8/14/06, PROSECUTION IS HEREBY REOPENED. A new set of rejections using the same references is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5,7-11,14 are rejected under 35 U.S.C. 102(b) as being anticipated by Krauss (US 6,086,126).

Re claims 1,8, Krauss teaches a tool 10 that could be used for lifting a CMP pad 38, comprising:

a non-pivoted jaw structure (20) having an upper jaw portion 20a (with an arcuate lower surface) and a lower jaw portion 20b, the lower jaw portion having a sloped (relative term, also zero or 90 degree slope is still a slope) upper surface that could slidably receive a portion of the pad 28;

a first member 32 pivotally coupled to the jaw; and

a second member 26 pivotally coupled (indirectly) to the first member, the second member having a surface opposite to the sloped surface of the lower jaw portion and operable for clamping the portion of the pad against the sloped surface when the first member is pivoted upwards.

Re claim 2, Krauss teaches the upper jaw portion has an arcuate lower surface.

Re claims 3,9, Krauss teaches the jaw is arcuate.

Re claims 4,10, Krauss teaches the jaw 20 comprises a first half 20a coupled to a second half 20b.

Re claims 5,11, Krauss teaches the lower jaw portion comprises a substantially flat lower surface.

Re claims 7,14, Krauss teaches the surface of the second member comprises a textured surface 26b.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Worthington (US 2002/0121792) in view of Krauss (US 6,086,126).

Re claim 1, Worthington teaches a tool 10 that could be used for lifting a CMP pad, comprising:

a non-pivoted jaw structure 16 having an upper jaw portion 38 and a lower jaw portion 16(36), the lower jaw portion having a upper surface that could slidably receive a portion of the pad 28;

a first member 20,22 pivotally coupled to the jaw; and

a second member 14 pivotally coupled to the first member, the second member having a surface opposite to the surface of the lower jaw portion and operable for clamping the portion of the pad against the sloped surface when the first member is pivoted upwards.

Worthington does not teach the lower jaw portion having a sloped upper surface. Krauss teaches the lower jaw portion having a sloped upper surface. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Worthington by Krauss to have the upper jaw portion having an arcuate lower surface and the non-pivoted jaw structure being arcuate in order to avoid sharp surfaces that may tear or damage the pad and to assist insertion of the pad into the jaw.

Re claims 2,3, Worthington does not teach the (upper) jaw portion having an arcuate lower surface nor the non-pivoted jaw structure being arcuate. Krauss teaches the upper jaw portion having an arcuate lower surface and the non-pivoted jaw structure being arcuate. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Worthington by Krauss to have the upper jaw portion having an arcuate lower surface and the non-pivoted jaw structure being arcuate in order to avoid sharp surfaces that may tear or damage the pad and to assist insertion of the pad into the jaw.

Re claim 4, Worthington teaches the jaw 16 comprises a first half coupled to a second half.

Re claim 5, Worthington teaches the lower jaw portion 16(36) comprises a substantially flat lower surface.

Re claim 6, Worthington teaches the first member 20,22 comprises a cutout 30 in which a portion of the second member 14 is pivotally positioned.

Re claim 7, Worthington teaches the surface of the second member 14 comprises a textured surface 36.

Re claims 8,9, Worthington teaches a tool 10 that could be used for lifting a CMP pad, comprising:

a non-pivoted jaw structure 16 having an upper jaw portion 38 and a lower jaw portion 16(36), the lower jaw portion having a sloped (relative term, also zero or 90 degree slope is still a slope) upper surface that could slidably receive a portion of the pad;

a first member 20,22 pivotally coupled to the jaw; and

a second member 14 pivotally coupled to the first member, the second member having a surface opposite to the sloped surface of the lower jaw portion and operable for clamping the portion of the pad against the sloped surface when the first member is pivoted upwards.

Worthington does not teach the (upper) jaw portion having an arcuate lower surface nor the non-pivoted jaw structure being arcuate. Krauss teaches the upper jaw portion having an arcuate lower surface and the non-pivoted jaw structure being arcuate. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Worthington by Krauss to have the upper jaw portion having an arcuate lower surface and the non-pivoted jaw structure being arcuate in order to avoid sharp surfaces that may tear or damage the pad.

Re claims 10,17, Worthington teaches the jaw 16 comprises a first half coupled to a second half.

Re claims 11,18, Worthington teaches the lower jaw portion 16(36) comprises a substantially flat lower surface.

Re claims 12,19, Worthington teaches the first member 20,22 comprises a cutout 30 in which a portion of the second member 14 is pivotally positioned.

Re claims 13,20, Worthington teaches a cap 32 coupled to the first member to laterally enclose the cutout.

Re claim 14, Worthington teaches the surface of the second member 14 comprises a textured surface 36.

Re claims 15,16, Worthington teaches a tool 10 that could be used for lifting a CMP pad 28, comprising:

a non-pivoted jaw structure 16 having an upper jaw portion 38 (with an arcuate lower surface) and a lower jaw portion 16(36), the lower jaw portion having a sloped (relative term, also zero or 90 degree slope is still a slope) upper surface that could slidably receive a portion of the pad 28;

a handle 20,22,18 pivotally coupled to the jaw; and

a member 14 pivotally coupled to the handle, the member having a textured surface 36 opposite to the sloped surface of the lower jaw portion and operable for clamping the portion of the pad against the sloped surface when the first member is pivoted upwards.

Worthington does not teach the (upper) jaw portion having an arcuate lower surface nor the non-pivoted jaw structure being arcuate. Krauss teaches the upper jaw portion having an arcuate lower surface and the non-pivoted jaw structure being arcuate. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Worthington by Krauss to have the upper jaw portion having an arcuate lower surface and the non-pivoted jaw structure being arcuate in order to avoid sharp surfaces that may tear or damage the pad.

Conclusion

Applicant's arguments filed 8/14/06 have been fully considered but they are not persuasive.

Applicant's arguments with respect to the 102 rejections in view of Worthington have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 8/14/06 regarding Krauss have been fully considered but they are not persuasive.

Applicant has defined "sloped" as being "other than horizontal or vertical" (page 8 of Appeal Brief). This term is now being considered as defined by applicant rather than the commonly definition where horizontal and vertical have a slope of zero and infinite respectively (see attached references).

Applicant argued that side plates 16 and 18 of Krauss teach a non-pivoted jaw structure. However, the rejection states that the jaw comprises the items surrounding item identifier 20 (20a,20b).

Applicant argued that Krauss does not teach items 20a and 20b being sloped. However it is clear from the figures at least that the items 20a and 20b are sloped. Furthermore, as addressed above, "sloped" applies even to angles of zero or 90 degrees.

Applicant argued that Krauss does not teach items 32 and 26 pivotally connected, however they clearly connected thru item 20a as shown in figure 1.

Applicant argued that Krauss does not teach surfaces of 20a, 20b being arcuate, however this is also readily apparent in figure 1.

Applicant argued that Krauss does not teach 20a and 20b being coupled. Again this is clearly visible in figure 1.

Applicant argued that neither Worthington nor Krauss teach flat or textured surfaces. Figure 1 of Krauss and Worthington show the flat surfaces and certainly these items have a texture.

Applicant argued that Krauss does not teach torsion spring 32 being pivotally coupled with element 26. However, the spring 32 must pivot and rotate in order to work as shown in figures 3 & 4 and is actually forced to pivot by being pushed by element 26. Therefore items 32 and 26 are pivotally coupled thru the upper jaw 20a.

Applicant argued that the references do not teach a cutout. However passageway 30 is a cutout. The space between 20 and 22 can also be considered a cutout. The structure 10 could also be considered the result of the cutout of the various components that form the overall structure. Furthermore, this is not a method claim and the structure could have been fashioned by cutting out material.

Applicant argued that Worthington does not teach a cap, however cap 32 does enclose cutout 32.

Applicant argued that "element 26 does not clamp a portion of any pad against a sloped surface when torsion spring is pivoted upwards" and "element 26 does not appear to have any surface opposite a sloped surface of edge 20b." As stated before "sloped" applies even to angles of zero or 90 degrees. Furthermore, figures 3 & 4 show element 26 pivoting upwards and clamping a portion of pad 38 against sloped surface 20b, which is shown to even have a non-zero slope. And also it is noted that if even a portion of a surface is curved then the entire surface can be described as non-flat.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Scott Lowe whose telephone number is (571) 272-6929. The examiner can normally be reached on 6:30am-4:30pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

msl



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600